## What is claimed is:

- 1. A method of authenticating information communicated between a first communication device and a second communication device via a communications network, comprising the steps of:
  - a. receiving input data and generating facsimile information in a first format by said first communication device from said input data;
  - b. processing said input data to compute an encrypted checksum;
  - c. convolving said facsimile information with said encrypted checksum data to produce convolved data;
  - d. decrypting, at said second communication device, said encrypted checksum;
  - e. computing a checksum of said input data received at said second communications device; and
  - f. alerting a recipient at said second communication device in the event of a mismatch between said checksum data computed in step (e) and said decrypted checksum data in step (d).
- 2. The method of claim 1, wherein said first communication device is a digital facsimile apparatus.
- 3. The method of claim 1, wherein said second communication device is a digital facsimile apparatus.
- 4. The method of claim 1, wherein said first communication system is a computer system comprising communication means with communication software installed on said computer system.

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- 5. The method of claim 4, wherein a database system is communicatively coupled to said second communication device.
- 6. The method of claim 1, wherein said second communication system is a computer system comprising communication means with communication software installed in said computer system.
- 7. The method of claim 26, further comprising the step of:

  configuring an e-mail system for receiving and displaying an alert

  message to said recipient along with said received input data.
- 8. A method of authenticating the originality of document transmitted by an originating device and received by a destination device through a communication network, comprising the steps of:

scanning a document, intended to be transmitted, and generating information in a first format representative of said document;

calculating an encrypted checksum for said document;

convolving information in said first format with said encrypted checksum, thereby generating data in a second format;

transmitting information in said second format by means of said communication network to said destination device;

computing a checksum of data received by said destination device; decrypting said encrypted checksum at said destination device; and comparing said decrypted checksum with computed checksum at said destination device in order to verify the authenticity of data received at said destination device.

9. A system for authenticating information communicated over a network, comprising:

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an originating device, said originating device comprising:

means for generating data representative of data received by said originating device;

means for computing a mathematical value representing said input data; means for encrypting said computed mathematical value, thereby generating an encrypted mathematical value;

means for convolving said representative data and said encrypted mathematical value thereby producing a convolved data;

means for communicating said convolved data to a destination device; said destination device comprising:

means for computing mathematical value of data received at said destination device;

means for decrypting said mathematical value from said convolved data; means for comparing said decrypted mathematical value with mathematical value computed by said destination device in order to verify the authenticity of information received by said destination device; and

means for alerting a recipient at said destination device in the event of a mismatch between said decrypted checksum data and the checksum computed by the destination device.